normalization, data cleansing, data validation, and error correction / semantic drift handling. Only hindsight in light of Applicant's invention permits OA to suggest any relationship between the elements of the cited references and those of Applicant's specification and claims.

- *Synergistic result:* Even if the parts of references were analogous art and combinable, they miss the synergism of combination found in Applicants invention which combines using multiple semantic models, multiple types of semantic models (domain, topic, referent, etc.), model mappings, transformation rules, validation rules, and heuristic rules with a variety of elements to achieve novel effects including adaptive data transformation, data profiling, data normalization, data cleansing, data validation, and error correction / semantic drift handling.
- *Any combination would require multiple, separate awkward steps to implement, too involved to be considered obvious:* It is completely unclear how Georgalas and any other cited reference could be combined to achieve a data transformation system driven by semantic models since they neither share a common subject matter nor pertain to data transformation.

In addition to the above, the following pertains to a portion of the dependent claims:

- *Multiplicity of references:* With respect to OA's rejection of Claims 13, 23, and 29-36 (corresponding to new Claims 46, 68, 80, 82, 83, 88, 89, 90, 91, and), the fact that OA cites numerous references is itself evidence of non-obviousness.

Remarks Regarding Specific Dependent Claims

Claim 2

OA erroneously asserts that Georgalas (para 0089:19-21) teaches the step of mapping is further augmented with at least a third semantic model which is restricted to a third category of knowledge as in Claim 2. The cited passage does not mention semantic models or model mapping between semantic models, merely describing layers of abstraction within MOP. As noted above, OA does not provide a uniform interpretation of the prior art consistent with Applicant's claims and specifications.

Claims 3 and 4

OA erroneously asserts that Georgalas (para 0070:1-5) teaches that the first and second categories of knowledge pertain to a common application domain as in Claim 3 and that Georgalas teaches (para 0090:7-17) the common application domain is further modeled by at least one topic semantic model as in Claim 4. OA further asserts that Applicant's "common application domain" is equivalent to "attribute" in Georgalas. OA is unclear as to whether OA equates an "object" or an "attribute" in Georgalas with Applicant's "common application domain." OA seems to equate MOPClass with topic semantic model given the the asserted parallel of an analyzed object falling into a MOPClass (Georgalas) with common application domain falling into a topic semantic model. However, Applicant clearly states (Applicant, para 0080) that it is domain semantic models that represent a particular domain of application (i.e., application domain) and each comprises a set of topic semantic models. Neither a domain semantic model nor a topic semantic model are ways of *classifying* application domains, they are ways of *representing* application domains. It further explains that each topic semantic model represents a particular topic within the corresponding application domain. Hence, contrary to OA's assertion, a common application domain does not "fall into" a topic semantic model. Rather, every topic semantic model represents a particular topic which is a part of some application domain (in this case the application domain common to the first and second categories of knowledge).

Claims 5 and 6

OA erroneously asserts that Georgalas teaches (para 0094) at least a first topic is associated with the common application domain and a representation of the said association is maintained in a template as in Claim 5; and (para 0099-100) the template incorporates a second topic, relationships among the first and second topics, and at least one pre-defined rule as in Claim 6. OA asserts that the basic structure of the class MOPClass is equivalent to a template, a relationship is established among the many primitives (incorporated from the MOPClass) of the Behavior Class, which has input and output arguments, and that a Behavior Class can implement a Boolean Rule. However,

the cited passages in Georgalas do not teach application domains, topics pertaining to an application domain, or templates as in Applicant's claims and specification. The basic structure of the class MOPClass cannot be equivalent to Applicant's template, since a template must maintain an association between topics and an application domain (Applicant; para 0103) and the basic structure of the class MOPClass contains neither of these. MOP primitives are neither topics nor topic semantic models. Furthermore, the cited passages refer to distinct components in Georgalas (the first being a State Class and the second being a Behavior Class) and so cannot be combined without contradiction to satisfy the requirements of Claims 5 and 6 in the manner suggested by the OA.

Claim 7

OA erroneously asserts that Cha (C10:48-53) teaches that a third semantic model (as in Claim 2) is a referent semantic model as in Claim 7. Applicant's referent semantic models represent knowledge about a source or destination (para 0080), while Cha's "referent" does not. Cha merely designates certain information as a referent to be searched within a pre-Conceptual Graph. A pre-Conceptual Graph is a representation of a natural language sentence tree. The OA has taken a single word in Cha ("referent") out of context and has attempted to read Applicant's invention into the prior art by benefit of hindsight.

Claim 8

OA erroneously asserts that Cha teaches (C4:65 to C5:5) at least one of the semantic models describes the semantics of a message as in Claim 8, and asserts that message of applicant is equivalent to sentence of Cha. Messaging and message are terms of art within the application and data integration arts, and require that the document be communicated by a message-oriented hardware and/or software systems communications protocol. A natural language sentence is not such a message, and Cha does not disclose messages as in Applicants' claims and specification.

Claim 9

OA erroneously asserts that Cha teaches (C2:49-53) at least one of the semantic models describes the semantics of a Web Service as in Claim 9. Neither Georgalas nor Cha describe the Web Services protocol, let alone creating a semantic model that describes the semantics of a Web Service. At best, the cited passage in Cha merely mentions "Web documents" in passing and without explanation. OA offers no motivation to interpret this vague phrase as referring to a Web Service. A Web Service implements a specific standardized protocol (incorporating at least the XML and WSDL industry standards in a particular manner as specified by the World Wide Web Consortium – www.w3.org) well-known to those versed in the application integration arts and Cha does not mention a Web Service or any protocol for establishing a Web Service.

Claim 10

OA erroneously asserts that Meltzer (C18:64 – C19:1) discloses a semantic model that describes the semantics of a business document as in Claim 10. However, the cited passage merely describes storing interpretation information in the form of Meltzer's "semantic maps". Meltzer's semantic maps are used for specifying, for example, weights, currencies, product identifiers, and product features. Metlzer's semantic maps are functionally equivalent to lookup tables for translating data ***values***, not maps between business ***concepts*** represented in semantic models as in Applicant's claims and specification.

Claim 11

OA erroneously asserts that Georgalas teaches (para 0046) at least one of the semantic models describes the semantics of the content of an XML document as in Claim 11. The cited passage merely points to an illustration of the semantic structure of the XML "information model". Neither the semantic structure of a computer language or an information model constitutes a semantic model of a source relevant to a specified category of knowledge as is required by Claim 11 and the claims on which it depends.

Claim 12

OA erroneously asserts that Georgalas teaches (para 0009) at least one of the semantic models describes the semantics of the content of a database as in Claim 12. The cited passage refers to a prior art (a Federated DataBase Management System) incompatible with the goals of Georgalas invention and so also incompatible with OA reading of Georgalas invention on Applicants' claims (especially Claim 1). Georgalas states that the language has specialized semantics and "transformation must be expressed only in terms of these specialised semantics and therefore the result is complex, non-optimal and inflexible translations." He does not disclose building a semantic model of the content of a database, but rather of a representation of a database.

Claim 13

OA erroneously asserts that Holt (C9:19-26) discloses user input of semantic information to augment a semantic model as in Claim 13. OA erroneously asserts that re-indexing is equivalent to augmenting a semantic model. However, the cited passage does not disclose semantic models or any modification of them. A semantic index (i.e., an index of instances of concepts by concept name) is not a semantic model. Holt only discloses re-indexing when additional documents are added to the document collection so as to "re-establish the latent semantic structure of the modified document collection". OA is using a strained interpretation of Holt in order to read Applicant's invention into Holt with benefit of hindsight.

Claim 14

OA erroneously asserts that Georgalas teaches (para 0067) the set of semantic information is imported by means of a first adapter as in Claim 14 (which depends on Claim 13) and that first adapter of applicant is equivalent to wrapper modules of Georgalas. As noted above, Georgalas wrappers are not equivalent to Applicants' Adapters. Georgalas does not disclose using the set of semantic information to build a seed semantic model or a semantic model.

Claim 15

OA erroneously asserts that Meltzer (C8:1-15) discloses user modifying the semantic model (as in Claim 15) is equivalent to modifying a semantic model to map business transaction data descriptions to create a trading community. The cited passage mentions nothing regarding any modification of anything and OA is reading Applicant's invention into the prior art with benefit of hindsight. The BIDs (business interface descriptions) of Meltzer are not semantic models, but descriptions of services and the documents, including possibly other BIDs, to use in accessing those services (Abstract). Meltzer fails to teach anything compararable to a model mapping as in Claim 1 on which Claim 15 depends, so OA's assertion fails.

Claim 16

OA erroneously asserts that Georgalas teaches (para 0153:15-29) the step of creating semantic models includes augmenting the semantic models directly with at least one validation rule as in Claim 16, and asserts that "augment" by applicant is equivalent to Georgalas "customize the service's behaviour". As discussed above, Georgalas does not teach validation rules as in Applicants' claims and specification. A service is not a semantic model and neither is a service specification.

Claim 17

OA erroneously asserts that Meltzer (C23:3-8) discloses augmenting a semantic model with a transformation rule as in Claim 17. However, the cited passage merely describes transforming "property sets" into JAVA event objects. None of semantic models, transformation rules, or transformations among semantic models are disclosed in the cited passage. Furthermore, Applicants' invention is not limited to the use of BIDs, on which Meltzer's invention and the cited passage depend.

Claim 18

OA erroneously asserts that Cha (C1:49-C2:3) teaches implementing a semantic model as an ontology as in Claim 18. The cited passage in Cha mentions the prior art regarding using an ontology markup language (i.e., for marking documents) for semantic

representation, but teaches less about implementing a semantic model as an ontology than is already acknowledged as being in the prior art in Applicant's specification (para 0039-41). A specific use of semantic models is required by Claim 18 and described in Claim 1 on which it depends. As Cha does not provide this step and as Claim 1 is not met by either Georgalas or Cha, the rejection of Claim 18 is overcome.

Claim 19

OA erroneously asserts that Georgalas teaches (para 0018) at least one of the semantic models is represented by a standard knowledge description and query language as in Claim 19. The cited passage refers to MSL. MSL is "a logic-based object-oriented language" (para 0016) used for mediator and wrapper specification and query, not a general knowledge query language or a general knowledge description language. MSL is not a standard language, either de facto or de jure, but an obscure research language.

Claim 20

OA erroneously asserts that Georgalas teaches (para 0035) the semantic information is processed according to at least a first rule in order to accomplish at least one of the operations of data profiling, semantic mapping, semantic resolution, data cleansing, normalization, transformation, and validation as in Claim 20 (which depends on the Claim 13, the objections to which have been overcome above), but fails to explain which of these is asserted to be taught by Georgalas. The cited passage mentions a rule-based association among "component ones of the resources", but does not teach the purpose of these associations, let alone any of data profiling, cleansing, normalization, transformation, and validation. As discussed above, these associations are mere correlations for creating new resources from a combination of existing resources. Thus, OA's assertion reads Applicants' invention into Georgalas by benefit of hindsight.

Claim 21

OA erroneously asserts with respect to Claim 21 that Georgalas teaches (para 0089:26-29, 0071:1-6, 0072:1-5; 0153:15-29, and 0079) the steps of mapping the stored first semantic model to the stored second semantic model further comprises: selecting and

accessing said first semantic model based on association with a source; selecting and accessing said second semantic model based on association with a destination; presenting the semantic models to a user; eliciting selection of a first semantic element belonging to the first semantic model; eliciting selection of a second semantic element belonging to the second semantic model; establishing an association between the first semantic element and the second semantic element; providing the option of using system help as needed; defining each relevant transformation rule; defining each relevant validation rule; providing the option of storing the resulting model mapping; permitting editing of the association; and, storing the model mapping. Georgalas teaches none of these, let alone all of them.

OA erroneously asserts in responding to Claim 21 that MOPClassA and MOPClassB of Georgalas are equivalent to first and second semantic models of applicant (this cannot be the case since MOPClassA is an instanceOf – i.e., *instantiates* or *is a specific example of* MOPClassB and creates a type hierarchy (para 0089). By stark contrast, Applicant's first and second semantic models (which must be presumed distinct unless otherwise stated) are associated with possibly distinct first and second categories of knowledge. If one semantic model is an instance of the other, then no user-defined model mapping (establishing an association between the components of the two models as in a further step of the claim) is possible since the relationship between concepts must be fixed. and such a hierarchy cannot be assumed in applying Applicant's method which has no such limitation.

OA erroneously asserts in responding to Claim 21 that an interface enables a system to present semantic models to the user and when the user interacts with a given resource this is the first semantic model (a resource is not a semantic model). OA's citation is taken out of context and describes a program module that "provides for a resource specification tool" (para 0069) for "declarive specification of a service, or generally a resource" (para 0073) which "permits the user to specify a new resource" through "determination of the manner in which component resources are to be associated and in which they will consequently interact" (para 0072). A specification as in Georgalas (para 0073) is a

language specification (see Georgalas examples which refer to "meta-model of semantics" of languages and "semantics of the [relational] data model") or object specification (from which an object can be generated), not a semantic model as in Applicant's claims and specification.

The purpose of Applicant's method is different from that of Georgalas and does not require, introduce, or involve resources as in Georgalas nor does Georgalas describe a user interface for associating selected elements of first and second distinct semantic models each selected by the user and each of which is further associated with a source (a document source is not a Georgalas resource which has a resource specification part and a mechanism for interpreting functionality part – para 0076). Applicant's method is not limited to Georgalas resources, and its purpose is establishing a particular kind of mapping between two semantic models (a model mapping) which method is not performed in the prior art, let alone in Georgalas. OA is reading semantic model into the cited prior art with hindsight of and in light of Applicant's invention.

OA further and erroneously asserts in responding to Claim 21 that the method of Georgalas responds to the display of the contents, thus eliciting a response and establishing an association. Such reading of Georgalas is incorrect. None of the cited passages (para 0071-0072, 0079, 0089, 0153) in the OA disclose any method which simultaneously incorporates displaying two semantic models, selecting components of each semantic model, providing an interactive help system, defining at least a first transformation rule among data represented by the components, defining at least a first validation rule on data represented by one of the components, and storing the model mapping. At best, Georgalas discusses displaying the contents of the repository (pp0072) in order to specify a new resource, with popup menus to edit node labels (para 0153). This hardly constitutes an interactive help system as taught by Applicants' claims and specification. OA erroneously asserts that MOPClasses are equivalent to first and second semantic models of Applicants, but Georgalas does not disclose displaying MOPClasses for the purpose of creating a model mapping. Even MOPper (Fig. 9-10, para 0152-0156) teaches only a user interface for defining policies (i.e., "the service specification for a

Behaviour Class" – para 0121). The service is a <u>policy</u> as Georgalas explains (pp 0119-0127) i.e., object behavior (para 0120). OA is clearly reading Applicants' invention into the prior art of Georgalas, requiring a strained reading that is not taught by Georgalas and would be foreign to one of ordinary skill in the relevant arts.

OA makes two assertions in response to steps of Claim 21 which Applicant finds incomprehensible and respectfully requests further elucidation if Examiner rejects new Claims 45 and 66 which replace Claim 21. First, OA erroneously asserts that "augment" by applicant is equivalent to Georgalas "customise the service's behaviour". However, Applicant does not use the term "augment" in Claim 21 and it has no relevance to the step of defining a validation rule to which OA responds. Furthermore, Georgalas does not refer to any form of validation in the cited passages. Second, OA erroneously asserts that "edit" by applicant is equivalent to "appropriate" by Georgalas. Applicants' step does not use the term "edit", and the cited passage (para 0076) refers merely to runtime invocation of component resources.

OA cites Georgalas (para 0079) in response to storing the model mapping. However, the cited passage merely refers to storing newly created "<u>objects</u>", not a model mapping. Georgalas does not define a model mapping as in Applicants' claims and specification, nor even use the term. OA again reads Applicants' invention into the prior art by hindsight. Georgalas' disclosure of rule-based associations does not disclose either transformation rules or validations rules or their application as taught by Applicants' claims and specifications. The only rules Georgalas teaches are rules that can be used to validate a specification and policy rules (para 0078, 0123).

OA erroneously asserts in responding to Claim 21 that selecting one of three choices on each node of Georgalas (para 0153) defines conditions and actions of the association of applicant by having the ability to edit these actions and conditions. The cited passage does not teach the ability to edit actions and conditions of an association (assuming an association had actions and conditions), but of a policy (as discussed above). Applicants' invention does not require policies as disclosed by Georgalas. Even if a graphical

rendition of a semantic model or a model mapping consists of the nodes representing concepts or types of data elements and arcs representing relationships among the connected concepts or types of data elements of a directed graph (e.g., Applicant, para 0040), the further limitation of the graph being acyclic is not assumed by Applicant as it is by Georgalas (para 0153) and Applicant's nodes do not represent conditions or actions nor do Applicant's arcs represent transition between conditions/actions as in Georgalas (para 0153). Thus, Georgalas teaches a method that is incompatible with Applicants method even under OA's asserted equivalences.

Claim 22

OA erroneously asserts that Georgalas (para 0153) teaches the help system is an Interactive Guide and that Interactive Guide as in Claim 22 is equivalent to selecting one of three choices on each node of Georgalas, thereby defining conditions and actions of the method and providing an IG of Applicant. To the contrary, Georgalas never mentions any form of "help" let alone a "help system". Although Applicant is unable to identify OA's obscure reference to selecting one of three choices on each node, merely displaying a fixed set of choices would not constitute an Interactive Guide as described in Applicants' claims and specifications. Applicant's Interactive Guide, which is clearly described as context and application sensitive (para 00138, 0188-0196), a benefit not available to users of Goergalas' invention. Nonetheless, Applicant has rewritten Claim 22 to more clearly differentiate from the prior art.

Claim 23

OA erroneously asserts that Georgalas (para 0037) discloses implementing an Interactive Guide comprising steps of creating at least one candidate mapping between elements of said first semantic model and said second semantic model of Claim 23 because Georgalas does not disclose help, help system, or candidate mappings among the elements of semantic models.

OA erroneously asserts that Afeyan (para 0142) discloses presenting candidate mappings to a user as in Claim 23. On the contrary, the cited passage discloses demographic and

related criteria for (manually) selecting participants in the collective decision making process. Computerized selection is not taught. Nothing is presented to a user, including candidate mappings.

OA erroneously asserts that Altschuler (C5:57-C6:3) teaches "eliciting from the user selection of at least one weighted candidate mapping in the set" as in Claim 23. However, the cited passage merely describes an "unmet need" of a service that facilitates mapping higher-level semantic interactions to physical data. Such a mapping is not a candidate model mapping (which is between semantic models, not between "semantic interactions" and "physical data" as in Georgalas) as in Applicant's claims and specification. No method is described, nor does it describe any presentation of any candidate model mapping, weighted or otherwise.

OA erroneously asserts that Altschuler (C5:57-C6:3) teaches "modifying the model mapping according to the user selection" as in Claim 23. However, the cited passage merely describes an "unmet need" of a service that facilitates mapping higher-level semantic interactions to physical data and "cognitive work required by users to map their mental model of tasks and goals into the framework of applications". No method is described, nor does it describe any presentation of any candidate model mapping.

OA erroneously asserts that Holt (C4:40-49) discloses evaluating and eliminating invalid candidate mappings based on a threshold as in Claim 23. However, the cited passage describes the use of the score vector in evaluating the "performance" of candidate documents against a particular query. Candidate model mappings of Applicant are neither disclosed nor evaluated in Holt, and Applicant does not require use of a score vector or subspaces (weighted or otherwise).

OA erroneously asserts that Meltzer (C3:13-23) discloses assigning weights to candidate mappings as in Claim 23. However, the cited passage does not disclose weights at all but discusses mapping a logic structure of a document to entries in a list in order to provide a "semantic definition", giving as an example mapping codes to product names. OA

erroneously asserts that more than one weight portion (i.e., component weight) is equivalent to such a list of possible values. Meltzer does not disclose candidate mappings and nothing in Meltzer suggests using a list of possible values as weightings of candidate mappings.

Claim 24

OA erroneously asserts that Meltzer (C10:3-14) discloses candidate mappings and heuristics rules for determining weights as in Claim 24. OA erroneously asserts that a logical structure and definition of a document is equivalent to a candidate mapping and heuristic rule of Applicant. However, Meltzer fails to disclose heuristic rules, and the cited passage has nothing to do with candidate model mappings, weights on those mappings, or heuristic rules. The only use of heuristics in Meltzer is the mere mention of "heuristic view" (C9:1-2) and that Fig. 2 is a "heuristic diagram" (C10:3-6), neither of which comports with Applicant's rules for computing weights of candidate mappings, heuristic or otherwise. Furthermore, a diagram is not a rule.

Claim 28

OA erroneously asserts that Meltzer (C14:8-17) discloses avoiding recalculating weights unless updated by user (as in Claim 28). The cited passage does not discuss weights, let alone recalculation of weights after an update; it discusses *recompilation* of logical structures and the translator between documents when the business interface description is modified or updated. Recompilation is not recalculation and a BID (which OA previously asserted was a semantic model) is not an independently computable portion of a candidate mapping weight.

Claim 29

OA erroneously asserts that a weight is the same as a score, and cites Holt (C4:18-22) as teaching that the inclusion of each candidate mapping in the set is decided based on the weight of that candidate mapping as in Claim 29. However, the cited passage describes assigning a score based on a score vector using a term-document matrix based on keywords or terms appearing in the document. No candidate mapping as in Applicant's

invention is described by Holt. A score vector is thus not a weight applied to a candidate mapping, and a query is thus not a candidate mapping as described in Applicants' claims and specification.

Claim 30

OA erroneously asserts that a weight is the same as a score, and cites Holt (C4:18-22) as teaching the inclusion of each candidate mapping in the set is decided based on the weight of that candidate mapping exceeding a threshold as in Claim 30. However, the cited passage describes assigning a score based on a score vector using a term-document matrix based on keywords or terms appearing in the document. No candidate mapping as in Applicant's invention is described by Holt. A score vector is thus neither a weight applied to a candidate mapping, nor a threshold for such a weight, and a query is thus not a candidate mapping as described in Applicants' claims and specification.

Claim 31

OA erroneously asserts that Pham (C21:63-C22:3) teaches that the threshold (that must be exceeded by the weight of a candidate mapping) may be modified by the user as in Claim 31. However, Pham only describes allowing the user to specify an "active" threshold in the number of occurrences of a particular outcome. None of candidate mapping, weighted candidate mapping, or model mapping (or any functional equivalents) are taught or disclosed by Pham.

Claim 32 and 33

OA erroneously asserts that Lin (C19:22-27) teaches "limiting the number of candidate mappings in a set presented to the user to a maximum number" as in Claim 32 and that "the maximum number may be modified by the user" as in Claim 33. However, the cited passage merely describes a user-specified maximum number of documents to be presented to the user. Candidate model mappings are not equivalent to Lin's text documents, and neither candidate model mappings nor their functional equivalents are ever mentioned by Lin.

Claim 34

OA erroneously asserts that Holt (C14:17-27 and C19:33-36) discloses "how weights are generated" and "that there exists an interface pertaining to operations of mapping" as equivalent to "the user obtains an explanation of how the weigth of a selected candidate mapping was computed" as in Claim 34. However, one of the citations (C14:17-27) describes weigths in the term-document matrix, not weights of candidate mappings and the other citation (C19:33-36) discloses an interface for the user to request text mining operations, not operations of model mapping. OA misreads Holt, as neither citation discloses a computation of a weight of a selected candidate mapping, let alone providing an explanation of that computation as in Applicant's claim.

Claim 35

OA erroneously asserts that Cheng (para 0183) teaches that the user may modify any portion of the weight (of a candidate mapping) as in Claim 35. However, the cited passage does not describe modifying portions of a weight (i.e., component weights), but of changing parameters such as weights "to determine the color of the nodes and/or edges" of the gene ontology map. Cheng uses the term "map" as a synonym for "representation" (as indicated by Fig. 16A and paragraphs 0008 and 0166).

Claim 36

OA erroneously asserts that Afeyan (para 0271) teaches "the user may modify the method by which the weight is derived" as in Claim 36, and that the "embodiment allows the user to determine preferences of a particular mapping if required". The cited passage teaches that "...the demographic information collected *about each user* may be used to alter the evolutionary algorithm..." [emphasis added] the purpose of which is to allow the manufacturer to determine market segment preferences. Afeyan fails to disclose any of semantic models, candidate model mappings between semantic models, or weights assigned to candidate model mappings according to any computational method required to implement Applicant's claim.

Claim 37

OA erroneously asserts that Georgalas (para 0017) teaches accepting data via an Adapter as in Claim 37 and asserts that Adapter is a generic term used by Applicant for accepting and forwarding data. OA misstates Applicant's claims and specifications which clearly describe the functionality of Adapters and their classification into Data Adapters or Metadata Adapters (see para 0017, 0074-75, 0128, 0133, 0162, 0176-0185). Furthermore OA misstates Georgalas by asserting that Georgalas uses 'wrapper specification language' for accepting data. For reasons previously discussed, Applicant's Adapter is not equivalent to either Georgalas 'wrapper specification language" or to Georgalas 'wrapper.'

Claim 38 and 40

OA erroneously asserts that Georgalas (para 0132) teaches the Adapter is a SOAP Message Handler as in Claims 38 and 40. Applicant disagrees that Georgalas "specifying the semantics being based on W3C" is equivalent to applicant's SOAP Message: The cited passage is specifically discussing XML, not the more complex standard SOAP which Georgalas does not even mention.

Claim 39

OA erroneously asserts that Georgalas (para 0017) teaches forwarding data via an Adapter as in Applicant's claim 39, and that in Georgalas data is forwarded via an OEM (Object Exchange Model) which is equivalent to Applicant's Adapter. Applicant disagrees since OEM is an information model (Georgalas, para 0015), not a computer implemented method, program, or procedure as is an Adapter. Furthermore, and as previously discussed, Applicant's Adapters are not equivalent to either Georgalas wrappers (or the Wrapper Specification Language that specifies them) or mediators. OA's strained interpretation of Georgalas cannot be used to read Applicant's invention into the prior art.

Independent Claim 41

Claim 41

Each of the steps in Claim 41 is asserted by OA to be taught by Georgalas. Applicant respectfully disagrees and has addressed each of the citations to Georgalas above. Furthermore, Georgalas nowhere discusses any of data profiling, data cleansing, data normalizing, or validation as in Applicant's claims and specification.

Were an attempt made to produce applicant's invention using the components and methods of Georgalas, the result would not be functional and additional numerous steps not taught in the prior aret would be required to correct its many deficiencies.

Given all the above, the rejection of claims 1-41 are overcome. For all of the above reasons, none of Georgalas, Cha, Meltzer, Cheng, Altschuler, Holt, Afeyan, Lin, or Pham, either individually or in combination, read on Applicant's invention, and these references will not bar the new claims.